

**We Claim:**

1. A method for determining the weight of a load upon a load support means of a hydraulic lifting device, in particular in an industrial truck, in which method the pressure of hydraulic fluid within a lifting cylinder is measured and a reference curve representing the relationship between the weight of the load and the pressure of the hydraulic fluid is determined by multiple measurements of the pressure resulting from loads of known weight and said reference curve is stored, said method comprising the following steps:

lifting and lowering said load support means during a short period upon request of an operator or by automatic means to sense the load before and during load lifting and lowering operations,

obtaining a plurality of pressure measuring values while said load support means is being lifted and lowered during said short period, and generating a pair of average values of said pressure measuring values for lifting and, respectively, lowering, and

generating a third average value of said pair of average values for lifting and, respectively, lowering and applying said third average value to said reference curve for determining the weight of the load.

2. A method as defined in claim 1, wherein said multiple measurements are performed a predetermined period after initiating said lifting and lowering during said short period.

3. A method as defined in claim 1, wherein when there are varying basic loads a reference curve is determined and stored for each basic load.